

Effects of Color Code Personality on Creativity

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Abstract

Personality characteristics play an important role for creative activities. Therefore, this study aim is to find the effect of different characteristics of color code personality - red, blue, white, and yellow - on creativity. The research subjects are 125 students of Darul Ulum University in Jombang. The measurement tool is the color code personality profile and CORE scale. The data is analyzed by nonparametric statistical techniques. The study results indicate that characteristics of red personality tend to be most creative. In contrast, characteristics of white personality have the lowest creativity. Blue and yellow personalities tend to have creativity at a moderate level. It can be concluded that characteristics differences of color code personality affect on creativity.

Keywords: creativity, color personality personality traits.

INTRODUCTION

Creativity is a word often spoken by most people. The phenomenon occurs because they tend to see only the result of creativity and ignore how creative processes before generating a new idea or new action. Actually, creativity is a job that rackets brain and sweat in a relatively long time. Creativity is understood as a thought process to generate new useful ideas to person and environment (Suharnan, 2000b, 2011).

Csikszentmihalyi (1996) defines creativity as any action, idea, work to change an existing region, or develops another new area, for example in field of science, technology or art. The real progress of future humankind depends a lot on people whose most activity is to seek and create new things useful for life. They are known as creative-productive people. Their hands can create various very useful thoughts and new breakthroughs to solve various difficulties faced by society, such as environmental pollution, health, unemployment, education, and social conflict. Csikszentmihalyi (1996) tries to uncover the important potentials of creative people to produce creative works.

LITERATURE REVIEW

Csikszentmihalyi (1996) examine hundreds well known, creative (productive) producers from various fields. The study found the existence of ten contradictory (but normal) personal traits that rarely shared by ordinary people. For example, they have high intelligence or convergent thinking skills, but also divergent thinking, and imagination or fantasy, but also grounded in reality. Other contradictory traits are: creative people have introversion properties on one hand and extravert on other, humble but also proud of themselves, considerable energy but also plenty of rest and sleep, playing games but also self-discipline, between feminine and masculine (androgyny), often suffering (injured) due to his work but also enjoying it, and loving his work but also be objective on his work.

The combination of a number of opposing properties within creative people is a great potential for creativity. Furthermore, it can be asserted that creative processes involve potentials derived from ability to think and imagine (cognitive) and potentials from personality characteristics (noncognitive) (Ayan, 1997).

Suharnan (2000a, 2011) in psychology perspective has developed a theory of creativity components. It proposes that creative processes involve balanced functions among the four essential components of cognitive, motivational, personality or environmental. The new thoughts and works especially require high value or continuously produced by a person or group of people, optimal functioning of all components-cognitive, motivational, personality, and environmental characteristics. Adversely, it is almost impossible the new thoughts and work are produced without a balanced support of the four components. In other words, creative processes are a combination of four components functions, one of them should not be in a state of deficiency or deficit. Overall, there is little usage for creative processes if people has one or two very prominent components (e.g. cognitive and motivational abilities), but others components in a state of deprivation (e.g. personality or environmental characteristics).

Sternberg and Lubart (1995) in investment theory said that creativity is analogous to a good investor, a person invests his capital to make an undesired product or service, but he expected to have good prospects in future. Therefore, creativity is the confluence of several important sources, namely intelligence, knowledge (formal and nonformal), motivation, personality characteristics and environment. The role of each source is interactive, not additive, the matters is the availability of balance resources to make creativity in a person's life. Among these sources are the characteristics or traits of individual personality.

Based on the two theories, person's personality characteristics components have very important important

role and should not be ignored to make creative processes can run well and resulting in something new and useful. Based on these theories, different personality types between one person and another can affect the each level of creativity. Every personality type has a certain tendency in attitude, thinking and behavior, often referred as personality characteristics. There are some personality types that very conducive to creative activity. Conversely, there are also personality types that may have irrelevant and even inhibit creativity.

Many studies relate certain personality characteristics with creativity. Bloomberg (cited in Forisha, 1983), Moore, Gleser, and Warm (cited in Goldstein and Blackman, 1978) examined the correlation between personality type of field dependence and field independence on creativity. Judge (2003) examines the correlation between extroversion and introversion personality types and creativity (Vernon, 1987). The findings show individuals within certain personality types tend more creative than those within other personality types. For example, individuals with extravert type tend more creative than introvert types. Likewise, individuals with field independence types are more creative than field dependence types.

Creativity difference can occur in perspective of personality types based on color code (Hartman, 2004), which distinguishes four personality types: red, blue, white, and yellow. Each personality type has special differ properties one to another. Briefly, he suggests that red personality type presents the properties of fire, blue presents the properties of soil, white presents the properties of water, and yellow presents the properties of wind. Among these special traits, there are some that are relevant to creativity, and some are irrelevant, may even decrease or hamper creativity. This is because in general personality has special patterns in attitudes, behaviors, thinking, and feelings (Brunas-Wagstaff, 1998; Hall and Lindzey, 1970). There are possible differences of creativity among people who have red, blue, white, and yellow personality types.

Djalali (2004) also also showed calculation that researches were rarely intended to find a difference in creativity among people who have personality traits according to color code perspective based on Hartman. Therefore, current research can be regarded as a relatively new effort to examine the interrelation between creativity and personality types in other categories.

In addition to a new effort in categorizing individuals into other personalities, Hartman also included creativity personality characteristics. For example, people who have blue and white personalities tend more creative and activity, while red and yellow personalities tend to be less creative. This invites the researcher's curiosity to confirm Hartman's thought or theory empirically. In other words, Hartman's theory asserts, among other things, that personality characteristics according to certain color codes are more creative than other personalities will examined by empirical data. Color code personality theory is indeed new and very interesting to learn more deeply. The theory or concept of color-coded personality is based solely on observation of some individual cases (when interacting) and globally with respect to nations (e.g., red personality is characteristic of Chinese society, blue is American society, white is Canadian society, yellow is Australian society), and no specific and intensive scientific research has been done. This is most likely to be different if research involves more individuals with different backgrounds. Based on these reasons, it is necessary to conduct a study to obtain data that support the thought, so that it can be known whether there is a match between theoretical thinking with empirical facts. Consequently, if supported by sufficient empirical data, theory becomes a reliable grip. Conversely, if it is not supported by empirical data, it is necessary to revise the theory, especially in relation to give creative qualities for personality of a particular color code. Therefore, present study is aimed to discover the differences in creativity among personality traits according to color code, i.e. red, blue, white, and yellow.

Color Code Personality

Everyone has a basic personality. A person's personality has been formed since the first breath in womb. The person's personality can indeed develop, but will become core or basic nature. Personality is the essence of thoughts and feelings within a person who tells how he carries himself. Personality is a list of responses based on strongly held values and beliefs. Personality will direct a person's emotional reactions in addition to rationale for every life experience. In other words, personality is an active process in every person's heart and mind to determine how he feels, thinks, and behaves (Hartman, 2004).

Hartman (2004) divides the personality traits into four dominant aspects of nature - fire, earth, water and air. He then distinguishes four personality types of people according to color code - red, blue, white, and yellow personality types. The red personality represents the properties of fire - has a burning spirit in life. The blue personality represents the properties of soil - strong and firm in its position. The white personality represents the basic properties of water - flowing and following the flow. The yellow personality represents wind-blowing properties. Each personality type has its own uniqueness as a combination of strengths and weaknesses.

Personality is unique, no one is exactly same with others, even though they are born as identical twins. Indeed there are millions variations of personality, but according to Hartman (2004) personality of each person can be classified according to basic motives, needs and desires that tend to be stable throughout the life. Viewed from point of view of basic motives, needs and wants, everyone can be classified into red, blue, white, or yellow personality types. Classification based on this color is easier to remember. The more details can be read in table

1.

Table 1. Characteristics of Color Code Personality

Aspects	Characteristics of Color Code Personality			
	Red	Blue	White	Yellow
Motive	Power	Intimacy	Piece	Cheerful
Needs	Looks great (technically)	Being good (morally)	Feels comfortable (in heart)	Looks great (socially)
	Being the right side	Understood	Given own space	Cared
	Respected	Honored	Respected Praised	Respected
	Approved by a select number of people	Acceptance	Tolerance	Approved by majority
Desire	Hiding insecurity (strongly)	Uncovering insecurity	Saving insecurity	Hiding insecurity (loose)
	Productivity	Quality	Goodness	Happiness
	Leadership	Autonomy	Independence	Freedom
	Adventures challenge	Security	Satisfaction	A fun adventure

Source: Taylor Hartman, 2004, in Color Code, page 57.

Table 1 shows the differences in basic motives, needs and desires between four personality types - red, blue, white, and yellow. These differences can affect one's tendencies in thinking, performing, and behaving that lead to creativity. However, if only see the differences in motives, needs and desires, it seems that there is no clear direction on possible differences in level of creativity between the personality types. The obvious tendencies of creativity show the differences in desires of each personality type. Red personality has a challenging adventure. Yellow personality has a fun adventure. Meanwhile, blue personality wants security and white personality wants a sense of satisfaction (complacency). Based on this perspective, tendency to become creative will be owned by people with red personality types, followed by yellow. Therefore, adventure is an important aspect for creative spirit, while the security-oriented and complacent nature can decrease one's creative spirit. Desire explains others, leadership for red, autonomy for blue, independence for white, and freedom for yellow, although different from one personality to another not exactly shows productive creativity, so it is difficult to know their own inclinations. Therefore, researchers examine the scale of personality profiles compiled by Hartman and descriptions in his book to clarify them.

Color Code Personality and Creativity

Based on Hartman's personality profile, an analysis is done to adjectives and sentences using scale and descriptions (2004). Each personality has several characteristics relevant to creativity on one hand, and a number of characteristics that can inhibit or decrease creativity on other hand.

Csikszentmihalyi (1997) found some personality characteristics of creative people. Meanwhile, another research of Rushton, Murray, and Paunonen (1987) on creative researchers found nine personality characteristics relevant to creativity. In accordance with weighted sequence of scores (factors) for each personality trait, the most important are: ambitious - having aspirations to accomplish difficult tasks, striving (competitive) and competitive (71); endurance - having a willingness to work long hours, resilient, and not easily to give up (61); seeking certainty - disliking ambiguity or uncertain information, and asking all questions to be answered in full (58); dominant-seeking to control the environment, strong and firm (49); showing leadership-taking the initiative and being responsible for task completion (41); aggressive - threatening and likes to attack the opponent (39); independent - avoiding coercion and enjoy independence (36).

In addition, some other personality characteristics of creative people are the spirit of freedom (and not fortitude), intellectual playfulness and sense of humor, sense of beauty, and imagination (Ayan, 1997; Berghe, 1987; Sternberg, 1985; Ziv, 1976). They are also intellectual-oriented, work-, and competitive achievements or skills (Jackson, 1987). Above personality characteristics of creative people can become a reference to assess characteristics of each personality type in according to color code.

Red. Red personality has properties relevant to creativity, such as adventure or challenging tasks, finding something new, competition, leadership, hard work, productivity, high self-confidence, self-reliance, and a lot of sense or intelligence. In addition, red personality also has traits that can inhibit creativity, as impatient, pragmatic, and power-oriented.

Blue. Blue personality traits that relevant to creativity are like to create something, idealistic, reliable, autonomous, and thoughtful. The blue attributes that can inhibit creativity are aware of something to details, perfection in all things (perfectionist), emphasizing the maintenance of manners (moral ethics), caution or consideration, and tend to worry about something.

White. White personality has properties that are relevant to creativity, such as likes to create, independent,

easy to adapt, and patient. In addition, white personality also has traits that can inhibit creativity, such as relaxed, unmotivated or reluctant to do, complacent, unfocused, and unsure of themselves or have feelings of inferiority.

Yellow. Yellow personality type has properties relevant to creativity, such as fun adventure, play, humor, spontaneity, optimism, change, freedom, and passion. In addition, yellow personality also has traits that can inhibit creativity, such as lack of commitment and consistency, dislike confrontation, and impulsivity.

Based on above description, it shows that each personality, whether red, blue, white, or yellow, on one hand has a number of personality characteristics of creative people, and on other hand also possesses some characteristic personality that inhibit creativity. The number of characteristics (both positive and negative) shows the difference between the color code personality. This difference may also result in different levels of creativity. Djalali (2004) found a difference of creativity between color codes personality. Red personality tends more creative, while blue and yellow tend to have moderate creativity. For white has the lowest creativity tendency than the others.

Based on creativity theories, previous research and descriptions of each color code personality characteristics, then present study can proposes hypothesis that there is a difference of creativity among individuals who have red, blue, white and yellow. Those who belong with many creative personality characteristics are more creative and having few personality traits that can inhibit creativity, they tend creative. Conversely, those who belong to uncreative color code personality have few personality traits of creativity and have many personality traits that can inhibit creativity.

METHOD

Subject

The research subject is a student of University Darul Ulum Jombang. Using purposive sampling, 125 subjects were chosen, consisting of 55 men, and 70 women.

Instrument Measurement

The color code scale developed by Hartman (2004) is used to reveal the personality type of subject. This measurement reveals a person's personality based on motives, wants and needs. This measurement instrument consists of 30 statements grouped into two parts. First, 20 statements are intended to reveal the personality traits or natural tendency. Second, 10 statements are intended to reveal the tendency of a person's behavior (response) in face of a particular situation. Each statement is provided with four choices: "a" for red, "b" for blue, "c" for white and "d" for blue personality, as shown below.

I tend	I tend
1. a. selfish b. suspicious c. not sure d. not contrived	3. a. resolute b. aware of little things c. a good listener d. loves to party
2. a. likes to criticize others b. too sensitive c. shy d. looking for attention	4. a. unforgiving b. a lot of thinking c. do not want to get involved d. loves to show off

Situation
1. For me, the most meaningful life is when: a. Leded to many tasks and results; b. Filled by people and purpose; c. Free from pressure, coercion, and demands; d. Allow me to play, be happy, and full of good wishes.
2. When making a decision, I: a. Firm, clear, and reasonable; b. Consider carefully, carefully, carefully; c. Hard to decide, timid, and reluctant; d. According to conscience, changeable, and not hold firmly.

Score is obtained by summing the options a, b, c, and d. Subjects with "a" answers will be categorized as red, "b" as blue, "c" as white, and "d" as yellow personality types. Color code personality scales have been tested both the validity and reliability (Djalali, 2004).

CORE scale developed by Suharnan (2002a, 2016) is used to to reveal the creativity. This creativity scale is designed to measure one's creative potential through a personality or non cognitive approach. This is consistent with opinion of Albert and Ranco (1987) that generally the creative potential can be measured through two approaches, namely personality and ability.

The CORE scale reveals a person's passion or willingness to engage in activities to generate new ideas or useful new works. Components of this scale include (1) curiosity, (2) openness to experiences, (3) risk tolerance, and (4) energy. The total number of statements on scale is 80.

Statements example:

1. I often observe the behavior of various people silently.*
2. When visiting the exhibition, I am not interested to ask questions to officer.
3. I rarely interested to follow news about problems outside my field.
4. I make relationship with many people in society. *
5. I must avoid new work way, because otherwise work it will spend money uselessly.
6. My head is easily dizzy when thinking about quite heavy tasks.

Description: *) is an example of a positive statement.

The CORE scale uses the four point Likert scale of: a very appropriate (SS), quite appropriate (CS), less appropriate (KS), highly appropriate (STS). The positive statements will use score from 5,4,3,2, and 1. The positive statements will use reverse score from 1, 2, 3, 4, and 5.

Validity and reliability. The CORE scale has been tested, both validity and reliability, using subjects from high school students. The validity test uses the factor analysis, and the results show that this scale can reveal the four factors. This scale also has a high reliability at 0.93. In addition, this scale also has positive and significant correlation with divergent thinking (Suharnan, 2002a).

Data analysis

To categorize research subjects into red, blue, white, and yellow personality types, cluster statistical analysis is used in addition to manual methods as directed by Hartman as a developer of personality profile scales for color codes. In sequence, subjects with red personality type is 35 people, blue is 50 people, white is 21 people and yellow is 19 people. Meanwhile, for data on creativity used the raw scores that mired from subject through the CORE scale.

Data of personality types and creativity scores were analyzed by nonparametric statistical analysis techniques, SPSS for Windows 2000 program. The use of nonparametric statistics to analyze the research data has two reasons. First, number of subjects in each category or personality type is unbalanced or has a range of far-reaching differences. In addition, homogeneity test of variance on creativity scores for each personality type indicates non-homogeneous variance. Therefore, this research data is less qualified for parametric statistics.

RESEARCH RESULT

Research results generally showed the significant differences in creativity scores between subjects with red, blue, white, and yellow personality, at corrected $X^2 = 12.15$ ($P < 0.05$). In tandem, test results of different creativity scores between the personality characteristics of red, blue, white, and yellow are as follows. First, red personality is more creative than the blue and white personality. The red personality shows no difference in creativity when compared to yellow personality. Second, the blue personality is more creative than the white personality. Blue personality shows no difference in creativity when compared to yellow personality. Third, the yellow personality is more creative than the white personality.

In summary, the results of nonparametric statistical analysis (t-test) are shown in Table 2.

Table 2. Creativity Scores for Red, Blue, White, and Yellow Personality

Personality	N	Average	Red	Blue	White	Yellow
1	2	3	4	5	6	7
Red	35	85.66	-	-	-	-
Blue	50	61.84	-2.03*	-	-	-
White	21	42.07	-3.8**	-2.5*	-	-
Yellow	19	63.08	-1.99*	-0.5	-1.94*	-

Description: * = $P < 0.05$; ** = $P < 0.01$

The columns 4-7 are Z scores.

A general conclusion can be drawn from results the study result shows that people or individuals who belong to red personality tend to be very creative. Conversely, people who belong to white personality tend to be not creative. Meanwhile, people who belong to blue and yellow personalities tend to have creativity at a moderate level.

DISCUSSION AND CONCLUSION

It is generally found that differences in personality type according to Hartman's color code (2004) affect on creativity. Therefore, hypothesis that characteristic differences of color code personality affect on creativity is supported by empirical data. This study findings support previous research of Djalali (2004) which shows the

differences in creativity between color code personality of red, blue, white, and yellow. It is also in line with previous research results that personality type difference, such as the personality type between extrovert and introvert, and field independence with field dependence, can affect creativity. It can be said that people who belong to certain types of personality have a tendency to be creative, while those who belong to other personality types tend not to be creative. For example, extrovert personality types tend to be more creative than introverts, and field independence is more creative than field dependence (Golstein and Blackman, 1978; Judge, 2003).

These study findings, component creativity theory (Suharnan, 2000a) and investment theory (Sternberg and Lubart, 1995) support that personality characteristics is one important components in creativity. Since some personality types have relevant certain characteristics or traits to creativity, and some other personality types do not, they can affect a person's level of creativity. Consequently, components of personality characteristics should not be ignored in creativity studies as well as other important components, as cognitive, motivational and environmental abilities as proposed by theories.

This study results indicate that individuals who belong to red personality type tend to become most creative when compared to blue, white, and yellow personality types (see table 2). In contrast, individuals who tend to have the lowest creativity are those who belong to white personality type. This finding is inconsistent with Hartman's (2004) personality theory that people with blue and white personalities tend more creative than red and yellow personalities. This may be due to differences in paradigm to understand the phenomenon of creativity. Hartman perhaps emphasizes creativity as a career or profession, one's activity is aimed to generate new thoughts and work, such as research scientists, designers, book authors, and artists. Meanwhile, authors argue that creativity can occur in context of performing routine tasks or overcoming daily problems, making it more practical. For example, a change in attitude toward a task because of routine or saturation make a person seeks new challenges and tasks; a person who faces difficulties that cannot be solved in ordinary ways will look for alternatives that have never been done; someone continually searches for certain tips in an increasingly competitive business world (Suharnan, 1995, 2002b). It is natural that people with red and yellow personalities are more creative than blue and white personalities. Those who have a red and yellow personality is very confident and optimistic in face of life and loves adventure or challenging activities when compared with blue and white personality.

Based on these study findings, it may need to revise Hartman's thinking which states, among other things, that people who belong to red and yellow personalities are not creative, while those who belong to white personality are creative. For blue personality, gifted creative nature of this personality is supported by results of present study, although the creativity level tends below the red personality.

For convenience, discussion will start from those who have the most prominent creativity, red personality for highest creativity score. In contrast, white personality has lowest creativity score. This study results indicate that individuals with red personality tend to be most creative when compared with others. Some possible reasons are red personalities have special qualities relevant to creativity, such as self-confidence, lead, logical, ingenious, or resourceful (Suharnan, 1995), hardworking and task-oriented. On other hand, individuals with a white personality have very few relevant characteristics to creativity, such as self-reliance on one hand, and on other hand they have traits that can inhibit or degrade creativity, such as unmotivated-reluctant, lazy, self-indulgent and unproductive, not dare to take risks or be afraid to make decisions, and not confident. In fact, creativity requires, among others, high motivation, adequate confidence, and courage to take risks (Suharnan, 2000a, 2002a). These important variables are not owned by people who belong to white personality type, so it is natural that they tend to be less creative. Conversely, people with red personalities have these variables, so it is only natural that they tend to have a high level of creativity. This finding supports the hypothesis proposed in this study.

Individuals with blue and yellow personalities have moderate level of creativity. They have special features relevant to creativity, but not as much as red personality. For example, blue personality has idealistic, thoughtful, and quality orientation. The yellow personality loves a change and a fun adventure. Level of individual creativity with yellow personality is no different from red and blue personality. Meanwhile, blue personalities differ in their creativity levels compared to red personalities. This may indicate that many special traits of red and yellow personality are relevant to creativity. For example, individuals with red and yellow personalities like adventure despite their orientations difference. Those with red personalities enjoy challenging adventure activities (e.g. competitions), while those with yellow personalities like fun adventure activities (e.g. hobby funnels). Both these personalities also have high self-confidence, enthusiasm, and optimism compared to blue and white personality.

Future research should use more subject to get balance people for each personality type. People with white and yellow personality categories tend lesser in certain demographic population, and more for red and especially blue personality. Larger number and balance facilitates researchers to use parametric statistical analysis, it makes the research results becomes more accurate.

Researchers also should use creativity measurement tools in form of verbal or figural creativity tests (Suharnan, 2011). Previous researches use personality approach (e.g. CORE scale) to measure creativity. Using

creativity test, for example a divergent thinking test, may has a different result than the current study.

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